



BIOLOGY NMDCAT EARLIER PREP

PMC UNIT WISE TEST Unit-11

TOPICS:

- ✓ Ecosystem
- ✓ Evolution

Q.1 The ultimate source of energy in an ecosystem is:

- | | |
|-------------------|-----------|
| A. Photosynthesis | B. Plants |
| C. Sun | D. Water |

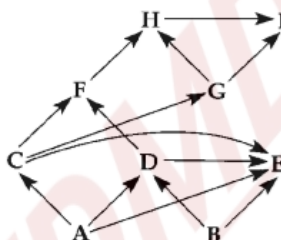
Q.2 The decline in the thickness of ozone layer is caused by:

- | | |
|---------------------------------------|---------------------------------------|
| A. Increasing level of nitrogen oxide | B. Decreasing level of O ₂ |
| C. Decreasing level of CFCs | D. Increasing level of CFCs |

Q.3 Subtraction of which of the following will convert gross primary productivity into net primary productivity?

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|---|---|
| A. Energy present in crop | B. Energy used by heterotrophs in respiration |
| C. Energy used by autotrophs in respiration | D. All solar energy |

Q.4 Consider the following food web.



If this were a terrestrial food web, the combined biomass of C+D would probably be:

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|----------------------------------|-----------------------------------|
| A. Greater than the biomass of A | B. Less than the biomass of H |
| C. Greater than the biomass of B | D. Less than the biomass of A + B |

Q.5 The pioneers in xerarch succession is the:

- | | |
|--------------------|-----------|
| A. Crustose lichen | B. Mosses |
| C. Foliose lichen | D. Shrubs |

Q.6 All the statements are correct regarding ecological succession except:

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|---|--|
| A. It is a random process | B. Species diversity increases with succession |
| C. Food chain relationships becomes complex | D. More decomposer function |

Q.7 Which of the following describes a successional event in which one organism makes the environment more suitable for another organism?

- | | |
|---------------|-----------------|
| A. Parasitism | B. Mutualism |
| C. Inhibition | D. Facilitation |

Q.8 Which of the following terms best describes the interaction between termites and the protozoans that feed in their gut?

- | | |
|--------------------------|-------------------|
| A. Commensalism | B. Mutualism |
| C. Competitive exclusion | D. Ectoparasitism |

Q.9 Which is correctly paired with its effects on the density of the two interacting population?

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|---|
| A. Predation : As one increases, the other also increases |
| B. Parasitism : Both populations decrease |
| C. Commensalism : As one increases the other remains same |
| D. Mutualism : Both decrease |

Q.10 Which of the following describes the relationship between legumes and nitrogen-fixing bacteria?

- | | |
|---------------|-----------------|
| A. Parasitism | B. Mutualism |
| C. Inhibition | D. Facilitation |

Q.11 In the nitrogen cycle, the bacteria that replenish the atmosphere with N₂ are:

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|--------------------------|----------------------------|
| A. Rhizobium bacteria | B. Nitrifying bacteria |
| C. Denitrifying bacteria | D. Methanogenic protozoans |

Q.12 Which of the following is the most direct threat to biodiversity?

- | | |
|--|-------------------------------------|
| A. Increased levels of atmospheric CO ₂ | B. The depletion of the ozone layer |
| C. Overexploitation of species | D. Habitat destruction |



- Q.13 The main contributors of acid rain are:**
A. Sulphur oxides and carbon oxides B. Nitrogen oxides and sulphur oxides
C. Carbon dioxide and carbon monoxide D. Nitrogen oxides and carbon oxides
- Q.14 The damage caused by acid rain is due to _____ nature of acid rain.**
A. Balancing B. Protecting
C. Withstanding D. Corrosive
- Q.15 Which of the following causes an increase in the intensity of UV-radiations reaching the earth?**
A. Depletion of atmospheric ozone B. Turnover
C. Biological magnification D. Greenhouse effect
- Q.16 Algal bloom is caused by:**
A. Availability of excess nutrients B. Increase in non-degradable nutrients
C. Lack of nutrients D. Decreased BOD
- Q.17 Due to eutrophication _____.**
A. Water gets harmful B. BOD decreases
C. Algae are destroyed D. BOD increases
- Q.18 Chemicals used for destroying agricultural competitors are known as:**
A. Antibiotics B. Disinfectants
C. Pesticides D. Chemotherapeutic agents
- Q.19 The nutrient cycles are also called:**
A. Biogeochemical cycles B. Bio element cycles
C. Biochemical cycles D. Geochemical cycles
- Q.20 Ozone filters ultraviolet radiations from the sun in the upper:**
A. Biosphere B. Lithosphere
C. Atmosphere D. Hydrosphere
- Q.21 How denitrification does occur in soils?**
A. Bacterial reduction of NO_3 ions to N_2 gas B. Active uptake of Nitrate ions by plant roots
C. Drainage of manure from fields D. Leaching of nitrate ions
- Q.22 A parasite, living inside body of the host is called:**
A. Ectoparasite B. Facultative parasite
C. Obligate parasite D. Endoparasite
- Q.23 The organism of third trophic level are:**
A. Primary consumer B. Tertiary consumer
C. Primary producer D. Secondary consumer
- Q.24 All the food chains and food webs begin with:**
A. Detritus B. Omnivores
C. Green plants D. Herbivores
- Q.25 Light rays from the sun are absorbed by CO_2 and re-radiate as _____ radiations.**
A. Ultraviolet B. Infra-Red
C. Indigo D. Green
- Q.26 The bacteria in the root nodules, fix nitrogen in soil from air, converting it into _____, which host uses.**
A. Nitrites B. Amino acids
C. Nitrates D. Proteins
- Q.27 Modern era scientists agree that life on earth came into being by:**
A. Creation B. Evolution
C. Sudden mutation D. Revolution
- Q.28 The one who believed in theory of special creation is:**
A. C. Linnaeus B. J.G. Mendel
C. J. D. Lamarck D. C. Lyell
- Q.29 In Lamarck's view, the key of organic evolution is that each progeny:**
A. Shows struggle for existence
B. Characters acquired by parental generation are inherited
C. Is similar to its parents
D. Phylogeny is repeated in its ontogeny



- Q.30 Origin of life is explained by all except:**
 A. Endosymbiont hypothesis
 B. Creationism
 C. Hydrothermal vent hypothesis
 D. Chemical evolution
- Q.31 About which of these did Darwin have a poor understanding?**
 A. Individuals exhibit variation
 B. Much of the variation inherited
 C. Individuals struggle for survival
 D. Sources of genetic variation
- Q.32 Which of this evolutionary agent is most consistent at causing populations to become better suited to their environments over the course of generations?**
 A. Mutation
 B. Non-random mating
 C. Gene flow
 D. Natural selection
- Q.33 Natural selection is most nearly the same as:**
 A. Diploidy
 B. Gene flow
 C. Genetic drift
 D. Differential reproductive success
- Q.34 The Darwinian fitness of an individual is measured directly by:**
 A. Number of its offspring that survive to reproduce
 B. Number of 'good genes' it possesses
 C. Number of mates it attracts
 D. Physical strength
- Q.35 Charles Darwin was the first person to propose that:**
 A. Evolution occurs
 B. Mechanism of evolution occurs
 C. Earth is older than a few thousand years
 D. Mechanism for evolution with evidence
- Q.36 Which of the following is not a vestigial organ in human body?**
 A. Wisdom teeth
 B. Ear muscle
 C. Appendix
 D. Sacrum
- Q.37 The animal species on the Galapagos resemble species living on the:**
 A. North American mainland
 B. Great Britain
 C. South American mainland
 D. Northern Europe
- Q.38 Production of more individuals than the environment can support leads to:**
 A. Struggle for existence
 B. Natural selection
 C. Survival of the fittest
 D. Evolution
- Q.39 In which rocks most fossils are found?**
 A. Metamorphic
 B. Sedimentary
 C. Igneous
 D. Sand
- Q.40 Which of the following are not the example of analogous structure:**
 A. Wings of bats and butterfly
 B. Thorn and spine
 C. Wings of bats and forelimb of cattle
 D. Wings of bats and sparrow
- Q.41 Which of the following branch first suggested the idea of evolution to Darwin?**
 A. Zoogeography
 B. Phytogeography
 C. Biogeography
 D. Geography
- Q.42 Which of the following animal lives only in America?**
 A. Kangaroo
 B. White rat
 C. Armadillos
 D. American python
- Q.43 According to molecular biology and cell biology, the ancestors of all life forms belongs to:**
 A. Protists
 B. Eukaryotes
 C. Prokaryotes
 D. Fungus-like protists
- Q.44 Oldest vertebrate fossils are of:**
 A. Dinosaur
 B. Archaeopteryx
 C. Fishes
 D. Prokaryote
- Q.45 Most appropriate group of mediums for fossilization is:**
 A. Sand, resin and ice
 B. Rock, magma and ice
 C. H₂O, dust and smoke
 D. Resin, amber and air
- Q.46 Almost same skeletal elements make up forelimbs of all except:**
 A. Humans
 B. Bats
 C. Cats
 D. Silver fish



- Q.47** Arms, wings, flippers and forelegs of different mammals are variations on common anatomical theme present:
- | | |
|-------------------------|----------------------|
| A. Convergent evolution | B. Organic evolution |
| C. Divergent evolution | D. Speciation |
- Q.48** Comparative anatomy supports that evolution is a _____ process in which ancestral structures that functioned in one capacity become modified as they take on new function.
- | | |
|---------------|------------------|
| A. Continuous | B. Discontinuous |
| C. Remodeling | D. Complete |
- Q.49** What are fossils?
- | | |
|-----------------------------------|----------------------------------|
| A. Dead remains of organisms | B. Traces of primitive organisms |
| C. Impression of former organisms | D. All A, B, C |
- Q.50** Evolutionary relationship among specie are reflected at molecular level in their:
- | | |
|--------------------|--------------------------|
| A. DNA and protein | B. DNA and carbohydrates |
| C. DNA and lipids | D. DNA and RNA |

English

1-B	11-A	21-A
2-B	12-C	22-B
3-A	13-D	23-A
4-C	14-B	24-A
5-B	15-B	25-D
6-A	16-A	26-C
7-A	17-D	27-B
8-C	18-C	28-C
9-A	19-C	29-A
10-D	20-D	30-C

Biology

1-C	11-C	21-A	31-D	41-C
2-D	12-D	22-D	32-D	42-C
3-C	13-B	23-D	33-D	43-C
4-D	14-D	24-C	34-A	44-C
5-A	15-A	25-B	35-D	45-A
6-D	16-A	26-B	36-D	46-D
7-D	17-D	27-B	37-C	47-C
8-B	18-C	28-A	38-A	48-C
9-C	19-A	29-B	39-B	49-D
10-B	20-C	30-A	40-C	50-A